

AMENDMENTS TO THE CLAIMS

The listing below of the claims will replace all prior versions and listings of claims in the present application:

Listing of Claims:

Claim 1 (currently amended): A method for combustion of a fuel with an oxidant in a heating furnace, wherein the fuel and the oxidant are delivered to a burner head, said method comprising: a first step of emitting fuel and oxidant from the burner head in close proximity to each other, so that combustion occurs adjacent to the burner head and for a time until a temperature that exceeds a spontaneous combustion temperature of the fuel is reached within the furnace; and a second ~~method~~ step of thereafter emitting the fuel and the oxidant from the burner head at a mutual distance apart, so that combustion occurs at a point spaced from and outwardly of the burner head at a distance of at least a diameter of the burner head , wherein the fuel is emitted from a fuel nozzle in the burner head, and wherein the oxidant is a gaseous oxidant that has an oxygen content of at least about 80% and is delivered at an overpressure of at least 2 bar and is only emitted through oxidant outlet openings located on a side of and spaced from the fuel nozzle at a distance that exceeds half the diameter of the burner head.

Claim 2 (previously presented): A method according to claim 1, wherein in the first step the fuel is emitted from a fuel nozzle in the burner head, and the oxidant is emitted concentrically around said fuel nozzle.

Claim 3 (canceled)

Claim 4 (canceled)

Claim 5 (canceled)

Claim 6 (canceled)

Claim 7 (previously presented): A method according to claim 1, including the step of using oil as the fuel.

Claim 8 (previously presented): A method according to claim 1, including the step of using at least one of natural gas and propane as the fuel.

Claim 9 (currently amended): A burner for combusting fuel with an oxidant in a heating furnace, where the fuel and the oxidant are delivered to a burner head, said burner comprising: a burner head having a diameter and including a fuel supply nozzle and a first oxidant outlet opening adjacent to the fuel nozzle so that combustion takes place adjacent to the burner head when the burner is operated in a first operating mode; wherein the burner head includes additional oxidant outlet openings that are located at one side of and at a distance from the fuel nozzle that exceeds half the diameter of the burner head, wherein oxidant delivered only to the additional oxidant openings of the burner head during a second operating mode, so that combustion takes place at a

distance from the burner head corresponding to at least a diameter of the burner head and outward of the burner head; and wherein the burner head delivers the oxidant at an overpressure of at least 2 bar.

Claim 10 (canceled)

Claim 11 (canceled)

Claim 12 (previously presented): A burner according to claim 9, wherein the additional oxidant outlet openings are at least one of Laval nozzles and venturi nozzles.